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DOCKET
09-AFC-10DATE MAY 14 2010RECD. MAY 14 2010

May 14, 2010

Mr. John Kessler
Siting Project Manager
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814

Subject: Rice Solar Energy Project (09-AFC-10)
Interim Report on Avian Point Count and Burrowing Owl Phase 2 Surveys

Dear Mr. Kessler:

Attached please find one hardcopy and one CD of Rice Solar Energy, LLC's Interim Report on Avian Point Count and Burrowing Owl Phase 2 Surveys for the Application for Certification for the Rice Solar Energy Project (09-AFC-10).

If you have any questions about this matter, please contact me at (916) 286-0278 or Sarah Madams at (916) 286-0249.

Sincerely,

CH2M HILL

A handwritten signature in blue ink, appearing to read "Douglas M. Davy".

Douglas M. Davy, Ph.D.
AFC Project Manager

Interim Report on Avian Point Count and Burrowing Owl Phase 2 Surveys

cc: POS List
Project File

May 9, 2010

Douglas M. Davy, Ph.D.
Program Manager
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Dear Doug,

Following is a summary of findings for Avian point count surveys and Phase 2/3 burrowing owl (BUOW) surveys at the proposed Rice Solar Energy Project (RSEP) located immediately south of Hwy 62 at the abandoned Rice Army Airfield.

The survey area included 4 square miles of creosote brush scrub, on a slightly south-sloping bajada. The habitat is fairly homogenous throughout the site, and generally has no significant changes in vegetation communities, large washes or treed areas. Some of the former air strip taxiways are still present as usable roads, and a large concrete pad exists in the north, along with several old building foundations. The site is used by weekend recreators for OHV exploration and shooting. A few large, barren areas exist on site that show evidence of use as camping areas.

BURROWING OWL PHASE 2 AND 3 SURVEY SUMMARY

Methods

Phase 2 Burrowing owl surveys were conducted in the spring of 2009 to determine whether the proposed site contained Burrowing owls and their burrows (identified by white wash, pellets, molted feathers, or prey remains). The result of those surveys indicated use of several burrows by owls on site (see table below). In 2010 additional Phase 2 surveys were conducted along the 150 meter buffer zone adjacent to the west edge of the project site. Also, Phase 3 Burrowing owl surveys were conducted as described by the Burrowing Owl Consortium's guidelines. Phase 3 surveys aim to identify presence of owls on the proposed development site specifically during the breeding season, and to describe their use of the site.

As outlined by the Consortium's protocol, surveys were conducted between 2 hours before sunset and 1 hour after, and 1 hour before sunset and 2 hours after. Surveys were not conducted during heavy rain, or in high winds (>20mph). Due to the large size of the project area, surveys were conducted two consecutive days each week for 4 weeks from April 13th to May 4th, which coincided with the peak breeding season (April 15th to July 15th). During surveys, nine previously identified burrows and their surrounding area were visited and examined for recent owl sign and the entire site was

visually scanned for owls from numerous locations. Because owls have been observed using man-made structures, old building foundations and concrete pads located at the north end of the site were also periodically visited and examined for use. In addition to specific Burrowing owl surveys, point counts were also conducted from 5am to 9am on site from April 5th to April 27th on 8 separate days which provided extra coverage and observational time on site.

Table 1. Burrowing owl burrows and associated sign detected on site.				
Date	Observation	Easting	Northing	Comments
		NAD 83, ZONE 11S		
13/5/2009	burrow	707161	3769005	on transmission line 100' ZOI
14/5/2009	burrow	702875	3771926	white wash, pellets. Main site
14/5/2009	burrow	702854	3771805	white wash, pellets. Main site
14/5/2009	burrows	703036	3771885	white wash, pellets. Main site
15/5/2009	burrow	702711	3772178	white wash. Main site
15/5/2009	burrow	702644	3771112	3 holes, white wash, pellets. Main site
16/5/2009	burrow	705284	3770626	white wash and pellets, recent use
2/4/2010	burrow	715645	3763999	transmission line, whitewash, pellets
5/4/2010	burrow	700797	3771974	white wash, pellets, Main site, west

Results

The Phase 2 survey resulted in the identification of one BUOW burrow as evidenced by the presence of white wash and pellets (last entry in Table 1). The phase 3 Burrowing owl surveys resulted in the detection of one owl feather found near a burrow found in the spring of 2009 along the proposed transmission line. It is difficult to determine when the owl feather was deposited on site, but it looked to be within the last few months due to its location on top of the annuals, and due to its visual appearance. No owls were seen on site and no new sign other than one feather was detected at the nine previously used burrows. Table 2 lists the record of survey.

Discussion

No evidence of nesting BUOWs was found. Several of the burrows have deteriorated over the past year, such that use is very unlikely, and in most cases, whitewash at these burrows looks weathered and pellets have annual plants growing over them. These results suggest that the site is used by Burrowing owls as a wintering, foraging or migratory stopover site. Winter surveys may be necessary to determine current non-breeding occupation of the site.

Table 2. Burrowing owl Phase 3 record of survey.

Date	Burrow ID	Datum: NAD 83 Zone 11S		Time start	Time end	Clouds (%)	Temp (Celsius)	Wind (mph)	Observation
		Easting	Northing						
13-Apr-10	2	707161	3769005	17:15	17:30	0	21.0	0-5	Old kit fox complex. No BUOW detected in vicinity, burrow looks collapsed with old whitewash on apron, burrow entrance likely much smaller than last year, spider webs and with debris partially concealing opening.
14-Apr-10	1	700797	3771974	7:30	7:40	0	10.0	0	1 pellet and 1 whitewash event that both look old at abandoned kit fox den. Pellet has annuals growing around it. No BUOW's detected on site.
14-Apr-10	3	702876	3771926	6:30	6:40	0	8.0	0	Extensive old whitewash on apron eroded and weathered by rain in winter, burrow hole very small due to erosion (~1") and runway choked with 75cm tall <i>Brassica tournefortii</i> . Use of this burrow is extremely unlikely as entrance to burrow essentially impossible.
14-Apr-10	4	702854	3771805	6:40	6:50	0	8.0	0	No whitewash or pellets seen at burrow, runway has significant amounts of <i>Plantago ovata</i> and <i>Cryptantha</i> sp. growing in it. Looks unused. Observed for 10 min. no BUOW detected.
14-Apr-10	5	703035	3771885	6:50	7:05	0	8.5	0	3 burrows within 3m radius, all 3 with whitewash and pellets. Lots of sign here, but its freshness is questionable, pellets are grown over by annuals and the whitewash looks slightly weathered. Cobwebs in 2 of 3 burrows as well as annuals in runway, still, the most promising burrows on site.
14-Apr-10	6	702711	3772178	6:15	6:30	0	7.5	0	Old whitewash on apron, no pellets seen at burrow, runway has significant amounts of <i>Plantago ovata</i> growing in it. Looks unused. Observed for 10 min. no BUOW detected.
14-Apr-10	7	702645	3771112	7:10	7:20	0	10.0	0	No pellets, no whitewash, found old kit fox scat, holes look large (canid) and actively used by canids, no owls detected in the area.
13-Apr-10	8	705284	3770626	18:25	18:55	0	22.0	0-2	Found 1 burrow that looked potentially active and clean in an abandoned <i>Spermophilus</i> burrow. Hole looks usable but a few <i>Plantago ovata</i> are growing in runway. Whitewash is extensive and looks moderately fresh, about 11 whitewash events and 10 pellets around burrow. Watched burrow from 75m to the S., no BUOW seen or heard.
18-Apr-10	8	705284	3770626	19:28	19:48	0	29.0	1.5	No BUOW detected at site, no new whitewash or pellets at burrow
19-Apr-10	9	715645	3763999	16:20	16:30	10	31.4	4.5	Checked burrow, totally collapsed with whitewash on apron. Unusable.
19-Apr-10	4	702854	3771805	17:20	17:40	0	29.0	4	No BUOW detected at site, no new sign, hole looks very small, possibly too small for an owl to fit. Spider webs at entrance.
19-Apr-10	3	702876	3771926	18:30	18:40	0	28.4	3.6	No BUOW detected at burrow, still looks unused, very small burrow entrance, too small for an owl, also runway choked with <i>Brassica tournefortii</i> .
19-Apr-10	5	703035	3771885	18:50	19:15	0	27.2	3.7	No new sign detected at burrows. Watched for 20 minutes 50m to the S.
19-Apr-10	1	700797	3771974	19:25	19:40	0	26.7	2.5	No BUOW detected, no new sign at burrow.

Table 2. Burrowing owl Phase 3 record of survey.

Date	Burrow ID	Datum: NAD 83 Zone 11S		Time start	Time end	Clouds (%)	Temp (Celsius)	Wind (mph)	Observation
		Easting	Northing						
25-Apr-10	8	705284	3770626	19:20	19:40	0	28.9	1.4	No new pellets or whitewash at burrow, but found one BUOW feather at 705268 3770614. Looks fairly fresh, not badly weathered and found on top of annuals, difficult to say when it was deposited here.
26-Apr-10	7	702645	3771112	18:10	18:33	0	34.2	1.4	No definitive BUOW sign found at site, spent 25 minutes walking around area looking for new burrows, sign, and owls. Nothing detected today.
26-Apr-10	3	702876	3771926	18:40	19:40	0	33.4	0.9	Walked around concentrated burrow area, no new sign, no BUOWs or sign detected
26-Apr-10	4	702854	3771805	18:40	19:40	0	32.2	0.9	Walked around area, no new sign, no BUOWs or sign detected
26-Apr-10	5	703035	3771885	18:40	19:40	0	31.8	0.9	Walked around area, no new sign, no BUOWs or sign detected
26-Apr-10	6	702711	3772178	18:40	19:40	0	31.4	0.9	Walked around area, no new sign, no BUOWs or sign detected
3-May-10	3	702876	3771926	18:30	20:30	0	26-29	0	Drove/walked around site to examine burrows, scanning area thoroughly for any sign of BUOW. No new sign detected on site or around burrows.
3-May-10	4	702854	3771805	18:30	20:30	0	26-29	0	Drove/walked around site to examine burrows, scanning area thoroughly for any sign of BUOW. No new sign detected on site or around burrows.
3-May-10	5	703035	3771885	18:30	20:30	0	26-29	0	Drove/walked around site to examine burrows, scanning area thoroughly for any sign of BUOW. No new sign detected on site or around burrows.
3-May-10	6	702711	3772178	18:30	20:30	0	26-29	0	Drove/walked around site to examine burrows, scanning area thoroughly for any sign of BUOW. No new sign detected on site or around burrows.
3-May-10	7	702645	3771112	18:30	20:30	0	26-29	0	Drove/walked around site to examine burrows, scanning area thoroughly for any sign of BUOW. No new sign detected on site or around burrows.
3-May-10	2	707161	3769005	18:30	20:30	0	26-29	0	Drove/walked around site to examine burrows, scanning area thoroughly for any sign of BUOW. No new sign detected on site or around burrows.
4-May-10	8	705284	3770626	6:00	6:15	0	13.3	1	No new sign at burrow or in area.
5-May-10	2	707161	3769005	6:50	7:10	0	24.5	0	No new sign at burrow, walked around area looking for BUOW burrows at <i>Spermophilus</i> complexes nearby. No sign of BUOW anywhere.
6-May-10	5	703035	3771885	7:40	7:50	0	26.5	0	No new sign at burrow or in surrounding area.
7-May-10	6	702711	3772178	7:55	8:05	0	27.0	0	No new sign at burrow or in surrounding area.

AVIAN POINT COUNT SURVEYS

As outlined by the BLM's avian survey protocol, point counts were conducted between 6 and 9 am, at a spacing of at least 250 m apart and a density of 8 per square mile. Due to the large size of the project area, surveys were conducted two consecutive mornings each week for 4 weeks from April 5th to April 27th. Counts were 10 minutes long at each point, and all birds seen or heard within a 100m radius were documented, including their sex, activity and behavior. Breeding behavior, especially detection of females, individuals carrying food or nesting material and active nests were also noted.

Species detected

Fourteen species were detected on the project site proper over one month of surveys (see Table 3). Six of those species were residents of the area and likely using the site for breeding. These species include Mourning dove, Lesser nighthawk, Loggerhead shrike, Horned lark, Brewer's sparrow and Black-throated sparrow. Horned larks were especially abundant on the site, followed by black-throated sparrows which were fairly abundant. Brewer's sparrows were commonly detected in the second and third sets of surveys, particularly on the westernmost point counts, where a shallow wash cut through the site. Here, there was a concentration of low, dense *Ambrosia dumosa*, which may provide desirable nesting habitat for the species and supporting a small, localized population of breeding pairs. Lesser nighthawks were also common on site, and were often heard singing early in the morning at dusk, and seen foraging in the evenings. One pair of Loggerhead shrikes was also detected in the southeast corner of the site.

A number of other species were detected on site and appeared to be using the area for foraging and cover. These species include the Northern harrier, Rock dove, Common raven, Cliff swallow, Northern Rough-winged swallow, Phainopepla, Yellow-rumped warbler and Red-winged blackbird. As a side note, point counts closest to Highway 62 seemed particularly quiet. It may be likely that breeding individuals avoid setting up territories close the highway due to the sometimes high levels of noise associated with traffic.

Table 3. Avian point count results.			
COMMON NAME	SCIENTIFIC NAME	CODE	ACTIVITY
Northern harrier	<i>Circus cyaneus</i>	NOHA	(FL, H)
Mourning dove	<i>Zenaida macroura</i>	MODO	(T, FL)
Rock dove	<i>Columba livia</i>	RODO	(FL)
Lesser nighthawk	<i>Chordeiles acutipennis</i>	LENI	(N, FL, F)
Loggerhead shrike	<i>Lanius ludovicianus</i>	LOSH	(FL, H, T)
Common raven	<i>Corvus corax</i>	CORA	(FL, F)
Horned lark	<i>Eremophila alpestris</i>	HOLA	(FL, F, N, T)
Cliff swallow	<i>Petrochelidon pyrrhonota</i>	CLSW	(FL, F)

Table 3. Avian point count results.			
COMMON NAME	SCIENTIFIC NAME	CODE	ACTIVITY
Northern rough-winged swallow	<i>Stelgidopteryx serripennis</i>	NRSW	(FL,F)
Phainopepla	<i>Phainopepla nitens</i>	PHAI	(FL)
Yellow-rumped warbler	<i>Dendroica coronata</i>	YRWA	(FL, F)
Brewer's sparrow	<i>Spizella breweri</i>	BRSP	(FL, F, T)
Black-throated sparrow	<i>Amphispiza bilineata</i>	BTSP	(FL, F, T)
Red-winged blackbird	<i>Agelaius phoeniceus</i>	RWBL	(FL)

Species code used in data sheets and activity noted as: FL-flying, F-foraging, H-hunting, N-nesting, T-territorial (singing, fighting).

Please let me know if you have any questions. Thank you,



Stephen Boland



BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
COMMISSION OF THE STATE OF CALIFORNIA
1516 NINTH STREET, SACRAMENTO, CA 95814
1-800-822-6228 – WWW.ENERGY.CA.GOV

**APPLICATION FOR CERTIFICATION
FOR THE *RICE SOLAR ENERGY POWER
PLANT PROJECT***

Docket No. 09-AFC-10

***PROOF OF SERVICE*
(Revised 3/4/2010)**

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DECLARATION OF SERVICE

I, Mary Finn, declare that on May 14, 2010, I served and filed copies of the attached, 09-AFC-10-RSEP - Interim Report on Avian Point Count and Burrowing Owl Phase 2 Surveys. The original document, filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at: [\[http://www.energy.ca.gov/sitingcases/ricesolar\]](http://www.energy.ca.gov/sitingcases/ricesolar).

The documents have been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

(Check all that Apply)

FOR SERVICE TO ALL OTHER PARTIES:

x ____ sent electronically to all email addresses on the Proof of Service list;

____ by personal delivery

____ by delivering on this date for mailing with the United States Postal Service with first-class postage thereon fully prepaid, to the name and address of the person served, for the mailing that same day in the ordinary course of business; that the envelope was sealed and placed for collection and mailing on that date to those addresses **NOT** marked "email preferred."

AND

FOR FILING WITH THE ENERGY COMMISSION:

x ____ sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (***preferred method***);

OR

____ depositing in the mail an original and 12 paper copies, as follows:

CALIFORNIA ENERGY COMMISSION

Attn: Docket No. 09-AFC-10

1516 Ninth Street, MS-4

Sacramento, CA 95814-5512

docket@energy.state.ca.us

I declare under penalty of perjury that the foregoing is true and correct.



Mary Finn